





# **Faculty Working Papers**

NATIONAL CONSUMER POLICY: A BEHAVIORAL VIEW

John A. Howard

#250

P. D. Converse Symposium Paper #1

**College of Commerce and Business Administration**  
**University of Illinois at Urbana-Champaign**



FACULTY WORKING PAPERS

College of Commerce and Business Administration

University of Illinois at Urbana-Champaign

June 13, 1975

NATIONAL CONSUMER POLICY: A BEHAVIORAL VIEW

John A. Howard

#250

P. D. Converse Symposium Paper #1



Digitized by the Internet Archive  
in 2012 with funding from  
University of Illinois Urbana-Champaign

<http://www.archive.org/details/nationalconsumer250howa>

## NATIONAL CONSUMER POLICY: A BEHAVIORAL VIEW\*

## I

Introduction

We propose a behavioral view of consumer policy as a complement to the traditional market structure analysis. The traditional view is not incorrect; it is incomplete.

The behavioral view being more detailed, however, necessarily loses some generality, but gains strength in the public policy recommendations that can be derived from it for a particular environment. We assume an environment of a decentralized government in a post-industrial society (Bell, 1974). The latter implies a high rate of technological change, a trend toward individualized media and a large element of consumption in services. Each of these conditions has implications that will be developed later.

The policy will be described in terms of the answers to four questions:

1. What are the goals of the policy?
2. What are the criteria that underlie the policy?
3. What are the principles and procedures for implementing the criteria?
4. Who should provide information to the consumer?

---

\*Address by John A. Howard in response to receiving the Paul O. Converse Award, University of Illinois, May 16, 1975 for his contributions to the field of marketing.



A statement of the goal of public policy provides an orientation from which to derive the policy. Criteria are the heart of any policy and they, of course, must be operationalized; they are applied in each specific case to the phenomena to evaluate its state in terms of the goals to provide an indication of nature and amount of needed correction. Principles and procedures are the technology for implementing criteria. Principles have to do with theory, the descriptive mechanisms of the phenomena (Howard, 1963; Howard and Sheth, 1969; Howard and Hulbert, 1973). The procedures are the means--concepts and techniques--by which the measurements of elements of the mechanisms are taken and evaluations made. As we will conclude, adequate information for the consumer is a central subgoal. Finally, who should provide this information? The seller can be responsible for it. Private information companies can be established; for example, Consumers' Union. Further, a variety of public agencies can accept the responsibility.

## II

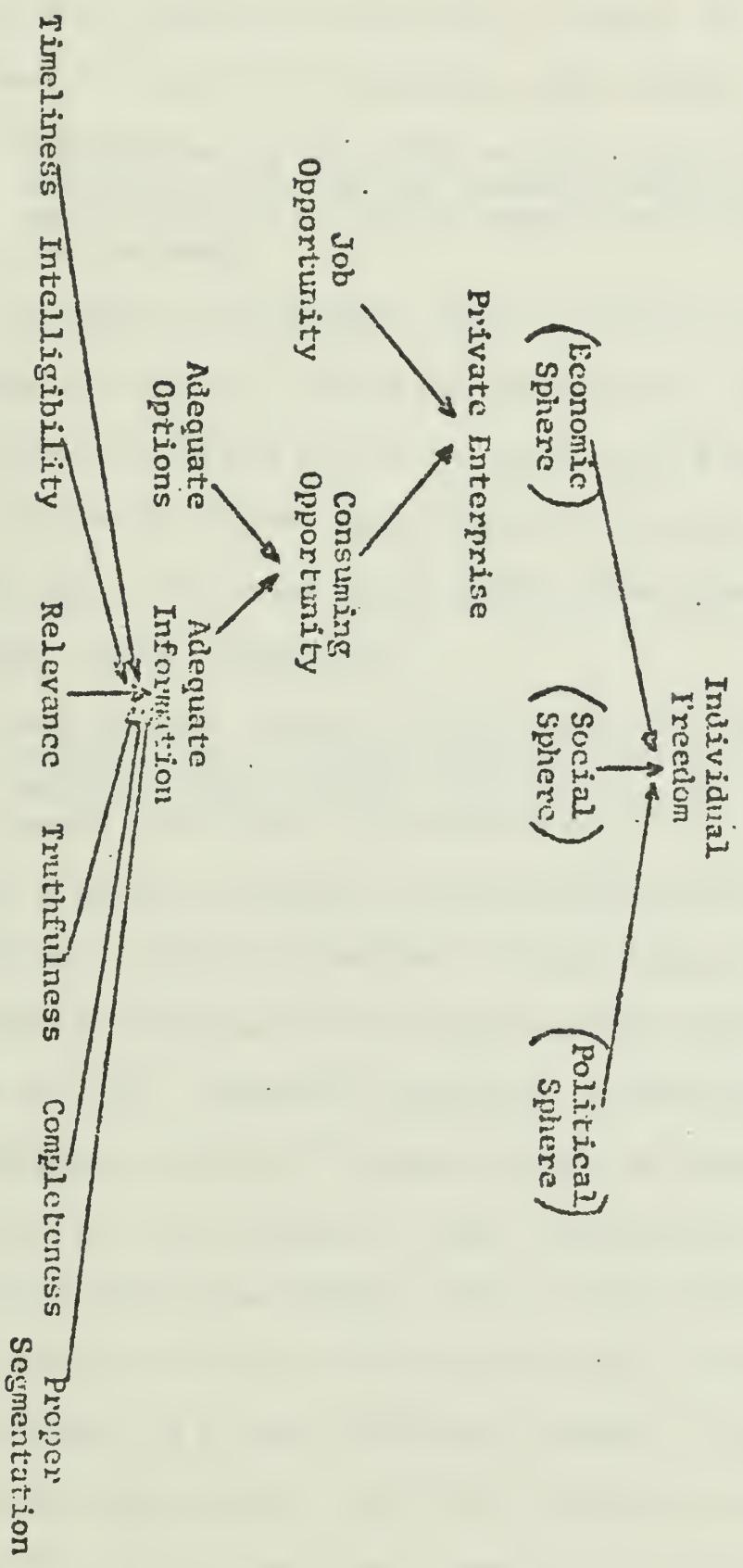
### Goal of Policy

From the time the United States was born, individual freedom has been one of the central goals of society. Value surveys today attest to its continuity (Rokeach, 1973).

As every American child knows, an economic tenet manifested by the goal was private enterprise, as portrayed in Figure 1. Underlying it were the twin subgoals of freedom to start your own business and consuming opportunity, also shown there.



Fig. 1. Means-End tree of Advertising and American Values





4

Perhaps, partly because of the heavy emphasis upon economic growth, Adam Smith's dictum of 200 years ago about the central role of the consumer in a private enterprise system (Smith, 1937) was almost ignored:

Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only as far as it may be necessary for promoting that of the consumer.

Antitrust legislation began to evolve in the latter part of the nineteenth century, such as the Sherman Act. Classical economics provided a rationale for it in the form of partial equilibrium theory. This rationale focused upon competition as the means for providing good things. As Lewis Engman (1974), Chairman, Federal Trade Commission, however, aptly phrased it:

But because economic theory binds the means and end so tightly into a causal relationship, we tend to measure only the causal factor--in other words, to focus on the means rather than the desired end.

Market structure analysis was developed in the 1930's under the aegis of Edward S. Mason to provide a fuller view of the process by which the end was achieved and so highlight the need to clearly separate means and end. Inserting explicitly a more varied range of ends to test whether, in fact, the good things of adequate options were provided for the consumer by each industry was a marked improvement. It helped bring Adam Smith's dictum about the consumer to fruition. Nevertheless, it did not face up directly to a central question about the consumer in a post-industrial society: Does he have adequate consuming opportunity? Adam Smith probably never dreamed of the set of conditions that confront a consumer in this environment.



### Consuming Opportunity

As seen in Figure 1, consuming opportunity is achieved through the two elements of adequate options and adequate information.

To simplify, we will assume that market structure provides a satisfactory rationale for the necessary non-inflationary, full-employment, efficiency and progressiveness in product and production to yield adequate options. Nothing more will be said on this side.

Only in quite recent years has the central question of adequate consumer information been articulated in public policy problems. In fact, as late as 1965 in hearings on the so-called truth-in-packaging legislation, it was not fully recognized. At that time, there was a variety of issues: inability of consumer to discriminate among brands; brand proliferation; proliferation of package sizes; and slack fill. None were sharply focused. Nevertheless, adequate information is in 1975 fully accepted. In fact, one could say that in the staff report to the Federal Trade Commission on nutritional advertising, it has been accepted with a vengeance. It recommends that in dealing with nutrition, food advertisers should, in their advertising, say what the Food and Drug Administration now requires they say on their labels.

An underlying premise of the argument that adequacy of consumer information should be added to the list of criteria of performance is that the consumer can and will process the information in a meaningful and useful way. What is the empirical evidence in this issue? The sharp increase in both the quantity and quality of consumer research in the past decade gives us growing confidence in the notion that the



behavior of some consumers under some conditions is consistent with our premise. We believe this number is usually enough to contribute substantial discipline to the market. The evidence is scattered, however, and not well summarized. Some of the most persuasive evidence that I have seen is represented in Figures 2 and 3 (Laroche and Howard, 1975).

In Figure 2, F (facts) represents information about Carnation Instant Breakfast. A is preference for the brand, often called attitude toward the brand, and B<sup>C</sup> is brand comprehension. F is a summary measure of talking with others about the brand, whether a sample was received, and number of media in which the brand was seen advertised. A was obtained on a seven-point liking scale. B<sup>C</sup> is the currently recalled physical, denotative, or referential characteristics of the brand. We interpret Figure 2 as telling us that when B<sup>C</sup> = 0, additional information does not contribute to A. As B<sup>C</sup> increases, increasing information has an increasing effect upon A. This interpretation is based partly upon Osgood's work, but more heavily upon Hebb. Hebb points out that a human conceptualizes an object at more than one level and that these conceptualizations differ in degree of abstractness (Hebb, 1968; Hebb et al, 1971). We can think of B<sup>C</sup> being the less abstract and A the more abstract. Further, B<sup>C</sup> is the foundation upon which the consumer builds his evaluative judgments of the brand.

In Figure 3, we see a similar set of relationships involving C where C is confidence in judging the quality of the brand. C is measured in a five-point scale. The effects of information upon C are not so marked as in the case of A above, but they are clearly observable in the diagram.

Normal tissue differential attenuation greater than group 2 of

bulky radiotherapy will have increased by 20% over 2 years.

A 10% increase in dose to 2g the upper left normal lung paren-

chyma is consistent with early grade toxicity data collected in previous studies.

Estimated survival rates for patients treated with radiation therapy

and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy alone were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Estimated survival rates for patients receiving radiation therapy and chemotherapy were similar to those receiving chemotherapy alone.

Fig. 2. Relation Between Information, Brand Comprehension and Attitude

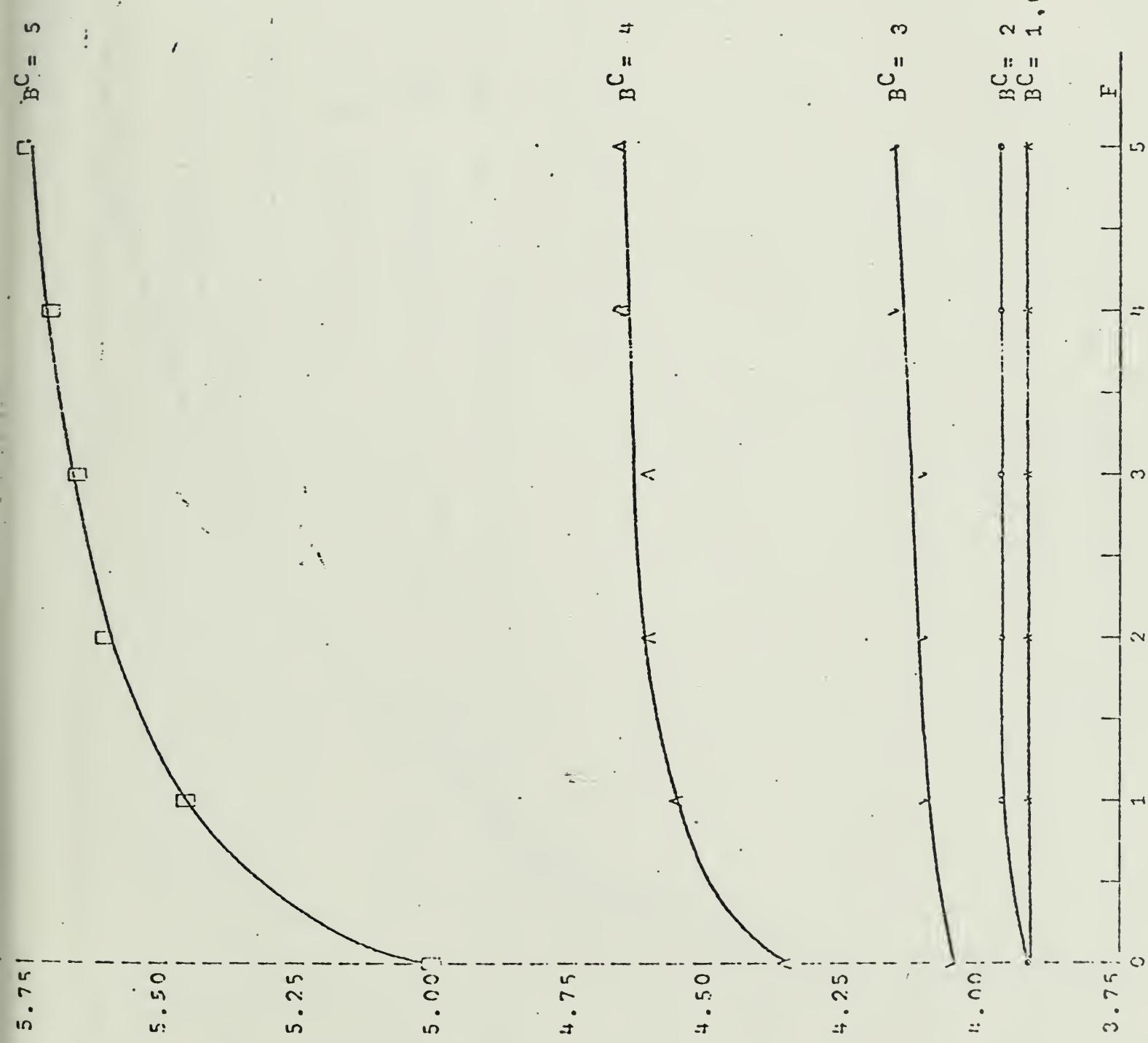
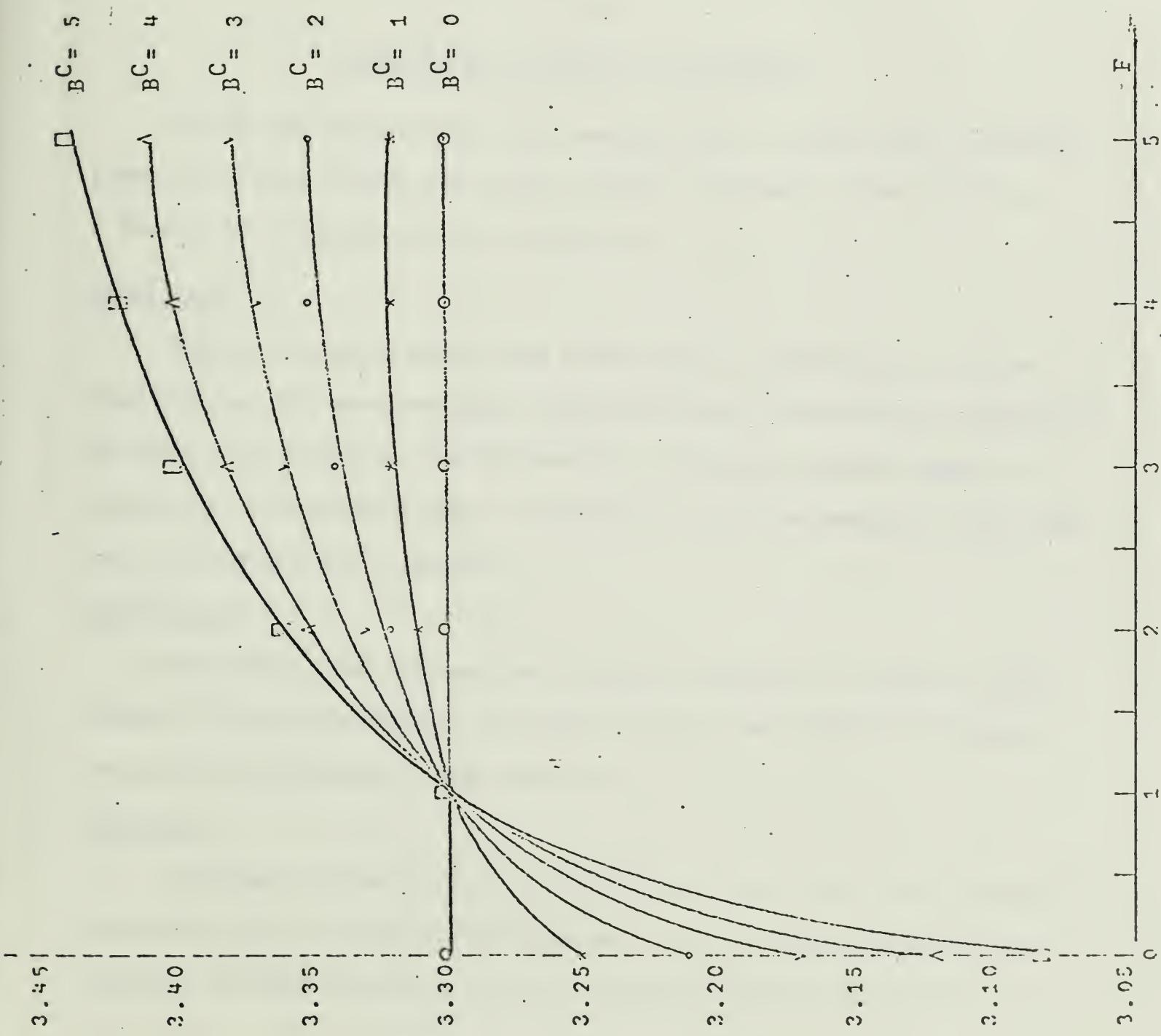




Fig. 3. Relation Between Information, Brand Comprehension and Confidence





We conclude these data support the notion that, on the average, consumers do process information in such way that informed rationality can be ascribed to their behavior. As a consequence, adequacy of information constitutes a meaningful goal for public policy.

### III

#### Criteria for Adequate Information

If we are to use this goal meaningfully, criteria are necessary. From a combined common sense and consumer theoretic point of view, a number of criteria can be formulated.

##### Timeliness

From consumer research and basic work in psychology, we know that whether the consumer pays attention makes a substantial difference in whether he receives the information. He pays attention when he needs the information. Thus, timeliness of the information would seem to be a significant criterion.

##### Legibility

Obviously, the information should be legible. It can be illustrated in print messages by the kind of type, some which facilitate perception, and others which hinder it.

##### Relevance

Consumer research has identified what information, under certain conditions, can be considered relevant. These conditions are perhaps largely captured in stages of the consumer's decision process.



Behaviorally we can think of the consumer as moving through a learning process divided according to extensive problem solving (EPS), limited problem solving (LPS), and routinized response behavior (RRB), with decreasing information requirements and decreasing decision time as he moves through these stages. We can also look at these three stages in concept terms. Let us begin with the simplest of the three cases: concept utilization. It is the simplest in terms of its information requirements because it is the most structured. He has learned this structure from the past and so needs less information to act with confidence.

The left part of Figure 4 is headed "Choice Criteria." These are the criteria on which the consumer evaluates the brand. First, his liking for the brand is captured in Preference. This could be measured on a five-point scale. Let us say that this is 4 and so "4" appears in the Evaluation column for the Preference row. Second, how about price, which usually makes a difference. On a five-point Inexpensiveness scale, let us assume he rates it only a 2 because it does seem rather expensive to him. Finally, does he think it is readily available in his neighborhood supermarket so that he will have to shop in a number of stores to find it? He recalls that he has seen it repeatedly in his local supermarket and so he rates it 4, as seen in the Evaluation column. His evaluation of the brand then sums to 10, and he will buy this brand over one rated 8, etc.

Now we can easily identify his information requirements. We assume that the quality of the brand doesn't change and that he knows all about it. Thus, his preference is fixed and so he needs no information to tell us which is the best brand. Price and availability of



Fig. 4. Evaluation of Brand A: Routinized Response Behavior

Choice Criteria	Evaluation
Preference	4
Inexpensiveness	2
Availability	4
	10

bioRxiv preprint doi: <https://doi.org/10.1101/1002>; this version posted January 10, 2017. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under a [CC-BY-NC-ND 4.0 International license](#).

Sample ID	Sample Name
1	Sample 1
2	Sample 2
3	Sample 3
4	Sample 4

the brand, however, may vary over time and thus he needs information to enable him to make a correct total evaluation of the brand.

Second, the attainment of a brand concept is a substantially more complex case, however. Here, the consumer is not clear about his preference and must have information to clarify it. Preference is but one of the three parts of the consumer's total concept of the brand, however. A second is the denotative or referential elements referred to in Section II above. It is called brand comprehension.

On this referential foundation of brand comprehension, the consumer builds his evaluative understanding of the brand. This is Preference of Figure 4, but not shown there is the fact that it is made of dimensions. He likes Carnation Instant Breakfast, not in general, but for particular reasons (dimensions): it is tasty and it is filling, for example. These dimensions are shown in Figure 5, which is an elaborated version of Figure 4. Also, each of the dimensions of Preference has a salience measure, as shown in Figure 5. Further, the brand is judged to lie on a certain position on that dimension and we call this position his "belief", as also shown in Figure 5. Finally, for each dimension, the salience is multiplied by the respective belief to provide an evaluation for that criterion. These evaluations can then be summed to provide a Preference estimate which would function in the buyer's mind with Inexpensiveness and Availability, as in Figure 4, to cause him to choose one brand instead of another.

To complete the Limited Problem Solving case, we must add the third part of a total brand concept. It is certainty or confidence



Fig. 5. Evaluation of Brand A: Limited Problem Solving

Choice Criteria	Salience	Belief	Evaluation
Tasty			
Filling			
Preference			
Inexpensiveness			
Availability			

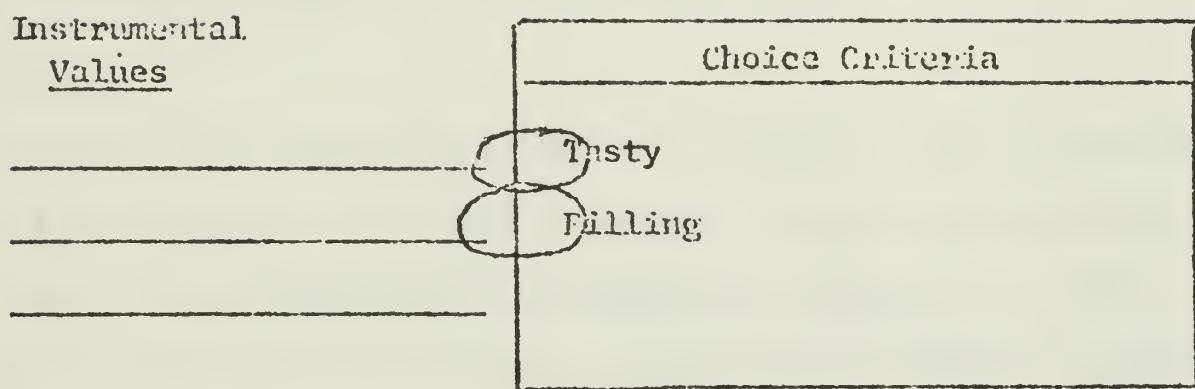


in his judgment. It is an indicator of the strength of his brand concept. Thus, the brand concept can be viewed as made up of three parts: the brand identifying elements which, taken together, we call brand comprehension; the evaluative elements shown in Figure 5; and the confidence elements. The latter elements can be thought of as the distinctiveness of the brand vis-a-vis competing brands, the consistency of his information and the amount of consensus on the information.

Finally, in the third case, which the economist calls "changing tastes" and we call Extensive Problem Solving, the consumer has not yet formed the dimensions of preference relevant to the particular product class and must have the required information to do so. He mentally constructs these dimensions by building on his values. Rokeach's (1973) exposition of values is useful for thinking about the connection between a consumer's values and his preference dimensions. Specifically, Rokeach's distinction between the more basic terminal values and the more action-oriented instrumental values tells us that preference dimensions are connected to instrumental values instead of terminal values. In terms of our earlier diagrams, we can portray these connections in Figure 6. The circles indicate that for the buyer to choose among brands of a product class, he must form a concept of the product class of which the brand is an element, and the formation of which requires information. Thus, we can see the great amount of information required for Extensive Problem Solving: brand comprehension must be formed, the preference dimensions formed, the brand located on the preference dimensions, the brand located on the remaining choice criteria and his certainty of judgment developed.



Fig. 6. Evaluation of Brand A: Extensive Problem Solving





### Truthfulness

That the information should be truthful is generally recognized and accepted. Truthfulness has two components, trust and competence. Trust has to do with the consumer's judgment of whether the motives of the source are consistent with his, or whether the source intends to mislead. Even if the source's motives are consistent with his, there is still the question of the competence of the source. Is the source technically competent to provide the truth?

### Completeness

Implied in the relevance criterion is that for all of the items making up product class and brand concepts, appropriate information is provided. To be explicit, the completeness criterion is added. Is enough information made available to build his confidence to the point where he can comfortably make a choice?

Implied in completeness, however, is also the notion that the information is no more than complete, that it is not excessive. The hypothesis is advanced with some but not conclusive evidence that too much information can hinder the consumer's decision-making (Jacoby et al, 1974).

### Appropriateness of Segments

Practically, and especially with mass media, unintended segments of the population may receive messages. The heterogeneity of the population makes this quite possible. Further, it could be that messages intended for one audience (segment) are not only useless for another but actually damaging. Many believe that this can be the



case when adult-intended messages are beamed to children, especially young children, perhaps five years of age and under. The prevalence of this belief is shown in the public support for limiting the television advertising that goes to children.

### Conclusion

This review of possible criteria for deciding what information the consumer needs provides us with a basis for deciding what information he should have. To implement such a policy, however, requires a great amount of technology.

## IV

### Technology of Adequate Information

Our purpose here is not to be exhaustive, but merely to illustrate the nature of the technology of information evaluation and design.

Implicit in the development of the criteria of adequate information in Section II was a substantial body of consumer theory. To apply these theory-based criteria is to implement their underlying theory. The same theory can also guide the development of the technology required for the implementation.

Not enough technology has been developed to fully accomplish the task, but it is rapidly evolving. Much was implicit in Section III, such as the labels of the scales used in eliciting the extent to which a consumer values a brand in terms of each of his preference dimensions.

A technology is likewise essential for the still more fundamental



problem of eliciting the dimensions themselves. These dimensions represent the product class concept, and we can think of product class concept as a set of associated words in the consumer's memory (Deese, 1965). When word association techniques are applied, it is found that some of these associated words are nouns of the same type as the product class such as instant breakfast, but represent different levels of generality such as food, breakfast food, etc. Some of them are nouns of a different type and are labels for things that instant breakfast is used with, such as milk. Finally, some of them are attributive words (adjectives) by which the consumer identifies and values the brands in the product class. The evaluative adjectives are the labels for the preference dimensions and other choice criteria described in Figure 5.

Further, these same words obviously constitute the verbal content in the design of the message for transmitting the meaning of the brand to those consumers who have not yet formed a brand concept. In the design of the message these nouns and adjectives, however, will have to be complemented by words of numerosity, largely adverbs, to fully convey that meaning. It is not precise enough to say "Carnation Instant Breakfast is tasty." The consumer needs to know how tasty it is. So it becomes "very tasty."

In addition to these measurement techniques and the psychological, social psychological and psycholinguistic concepts that contribute to the technology for applying the criteria, there is a substantial body of statistical and mathematical notions. Statistically, these are the clustering and other multivariate techniques, for example. Also,



there are the mathematical notions underlying the use of multiple equation models, which make possible both a comprehensive and detailed model of the consumer's total searching, buying and using process that occurs over time.

## V

### Source of Information

There is little doubt that the information requirements for the consumer are growing in American society, and a central question is "Who should provide this information?" As indicated above in the reference to nutritional advertising, the current policy seems to be moving in the direction of requiring the seller to make it available. Whether this is an appropriate policy is not clear, but from the earlier discussion some suggestions can be made to illustrate how the analysis developed in Sections II, III and IV that can help in formulating a policy.

When consumers of a product are in Routinized Response Behavior, it would appear that companies on their own will provide adequate information. In the first place, not much is needed, and that that is needed is the fairly simple facts of price and availability.

When they are in Limited Problem Solving, the issues are obviously more difficult. The volume of information needed is far greater and the eight criteria of adequate information in Figure 1 can be useful. Even affirmative disclosure may be necessary. Whether a private information company or governmental agency can do it better, or at least a part of it, will have to be answered in each case.



When the consumers are in Extensive Problem Solving, the issues are still more complex. Insofar as the tasks of the consumer are merely to relate a new configuration of choice criteria to his existing value structure, the problem is somewhat analogous to Limited Problem Solving.

Many new products, however, require value change and this raises serious questions about permitting, much less expecting, a private entity to perform this role. To permit it is to support one of the most serious criticisms leveled at advertising. It is a role we leave to the social structure. In the more concrete terms it is a task that perhaps can be done over a long period of time and should be left to our school system, much as driver education has been. Nutrition is a good example of this kind of problem, and the schools are proceeding to accept some responsibility. Ten states as of last year have, for instance, legislated policy concerning the teaching of nutrition in the public schools (Johnson and Butler, 1975).

## VI

### Conclusions

We are left with the conclusion that market structure analysis largely ignores a key problem of consumer policy. This problem is adequate information. Consequently, some type of behavioral analysis such as proposed here represents a necessary complement, not a supplement, to market structure analysis.

Regulation, whatever its rationale, however, must be advised in a thoughtful manner. The rapidity of technological change that



characterizes post-industrial society will probably erode entrenched positions that in the past would have been damaging to the welfare of the consumer. Examples of this will probably be found in the area of media. With the demise of more mass media, such as Life and Look, for example, and the rise of more individualized media such as specialized magazines, companies will often be gaining temporary advantage by utilizing the potential of these new media. Finally, the increasing proportion of services will offer additional opportunities for marketing skills for a firm in securing competitive advantage because the more abstract nature of the "product" renders the formation of product class and brand concepts more difficult to communicate and to form in the consumer's mind.



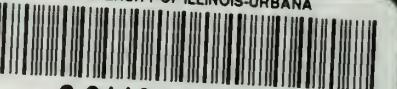
## References

1. Bell, Daniel, The Coming of Post-Industrial Society. New York: Basic Books, Inc., 1973.
2. Deese, James, The Structure of Associations in Language and Thought. Baltimore: The Johns Hopkins Press, 1965.
3. Elyman, Lewis, before the Antitrust Section of American Bar Association, August 14, 1974.
4. Hebb, D.O., "Concerning Imagery," Psychological Review 75 (1968), 166-67.
5. Hebb, D.O., W.E. Lambert and G.R. Tucker, "Language, Thought and Experience," The Modern Language Journal 55 (1971), 212-22.
6. Howard, J.A., Marketing: Executive and Buyer Behavior. New York: Columbia University Press, 1963.
7. Howard, J.A. and J. Hulbert, Advertising and the Public Interest: A Staff Report to the Federal Trade Commission. Crain Communications, Inc., 1973, Chapter 4.
8. Howard, J.A. and J.N. Sheth, The Theory of Buyer Behavior. New York: John Wiley & Sons, 1969.
9. Jacoby, Jacob, D.E. Speller and Carol A. Kohn, "Brand Choice Behavior as a Function of Information Overload: Replication and Extension," The Journal of Consumer Research 1 (1974), 33-42.
10. Johnson, Mary J. and Jane L. Butler, "Where is Nutrition Education in Public Schools?," Journal of Nutrition Education 7 (1973), p. 20.
11. Laroche, Michel and J.A. Howard, "Non-Linear Relations in a Complex Model of Buyer Behavior," Graduate School of Business, Columbia University, mimeo, 1975.
12. Rokeach, Milton, The Nature of Human Values. New York: The Free Press, 1973.
13. Smith, Adam, The Wealth of Nations. New York: Modern Library, 1937, p. 625.





UNIVERSITY OF ILLINOIS-URBANA



3 0112 060296693